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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,442	07/18/2006	Tadamasa Toma	2006_0814A	4852
52349 7590 11/06/2009 WENDEROTH, LIND & PONACK L.L.P. 1030 15th Street, N.W. Suite 400 East Washington, DC 20005-1503				
EXAMINER				
RAO, ANAND SHASHIKANT				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
11/06/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,442

Applicant(s)

TOMA ET AL.

Examiner

Andy S. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 9/21/09

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 37-42 as filed on 7/7/09 and 921/09 have been considered but are moot in view of the new ground(s) of rejection.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadono in view of Narisimhan et al., (hereinafter referred to as "Narisimhan").

Kadono discloses a moving picture stream generating apparatus which generates a stream including a picture including at least a pixel data storage unit for storing pixel data and an information storage unit for storing information (Kadono: figures 3-4, and 7), the information storage unit being placed before the pixel data storage unit (Kadono: paragraph [0146], lines 1-20), said moving picture stream generating apparatus comprising: a first coding unit operable to code first information in which picture type

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information of each of pictures included in a random access unit is arranged in decoding order of the pictures (Kadono: paragraph [0077], lines 1-12), the random access unit including pictures starting with a first I-picture which is a random access point and ending with a picture immediately before a second I-picture which is a random access point different from the random access point corresponding to the first I-picture (Kadono: paragraph [0026], lines -25); a second coding unit operable to code second information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Kadono: paragraph [0078], lines 1-12); and a generating unit operable to generate a moving picture stream by storing the coded first and second information into the information storage unit in the first I-picture, wherein the picture type information of the respective pictures (Kadono: paragraph [0086], lines 1-9), includes at least: an I- picture on which intra-coding is performed (Kadono: paragraph [0008], lines 1-10); a P-picture on which inter-coding is performed with reference to a picture per block which is a basic unit in coding (Kadono: paragraph [0009], lines 1-10); a first B-picture on which inter- coding is performed with reference to two pictures per block which is a basic unit in coding, and which can be referred to by a picture (Kadono: paragraph [0026], lines 21-32); and a second B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in coding, and which cannot be referred to by any other pictures (Kadono: paragraph [0100], lines 1-10), and the picture structure information of the respective pictures includes information indicating whether the picture structure of each picture is: a field structure (Kadono: paragraph [0007], lines 10-17); a first frame structure for displaying the picture using two display fields (Kadono: paragraph [0027], lines 1-9), as in the claim

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37. However, Kadono fails to disclose a supplemental information storage unit for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information, a second coding unit operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures; generating unit operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture, wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down; and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down, as in the claim. However, Narasimhan discloses a method, protocol, and apparatus for transporting advanced video coding content which includes a supplemental information storage unit for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information (Narasimhan: paragraph [0025], lines 1-12), a second coding unit operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Narasimhan: paragraph [0047], lines 1-5); generating unit operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture (Narasimhan: paragraph [0049], lines 1-5), wherein the picture type information of the respective

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pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down (Narasimhan: paragraph [0082], lines 1-6); and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down in order to configure AVC content for MPEG-2 transport protocols for transmission (Narasimhan: paragraph [0005], lines 1-10; paragraph [0008, lines 1-10). Therefore, given this teaching, it would have been obvious for one of ordinary skill in the art incorporate the Narasimhan SEI coding using 3:2 pulldown, into the Kadono apparatus in order to configure AVC content for MPEG-2 transport protocols for transmission. The Kadono apparatus, incorporating the Narasimhan SEI coding using 3:2 pulldown, have all of the features of claim 37.

Kadono discloses a moving picture stream generating method which generates a stream including a picture including at least a pixel data storage unit for storing pixel data and a information storage unit for storing information (Kadono: figures 10-12, 14), the information storage unit being placed before the pixel data storage unit (Kadono: paragraph [0146], lines 1-20), said moving picture stream generating method comprising: a first coding step operable to code first information in which picture type information of each of pictures included in a random access unit is arranged in decoding order of the pictures (Kadono: paragraph [0077], lines 1-12), the random access unit including pictures starting with a first I-picture which is a random access point and ending with a picture immediately before a second I-picture which is a random access point different from the random access point corresponding to the first I-picture (Kadono: paragraph [0026], lines -25); a second coding step operable to code second information in which picture structure information of each of the pictures included in the random access unit is

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arranged in the decoding order of the pictures (Kadono: paragraph [0078], lines 1-12); and a generating step operable to generate a moving picture stream by storing the coded first and second information into the information storage unit in the first I-picture, wherein the picture type information of the respective pictures (Kadono: paragraph [0086], lines 1-9), includes at least: an I- picture on which intra-coding is performed (Kadono: paragraph [0008], lines 1-10); a P-picture on which inter-coding is performed with reference to a picture per block which is a basic unit in coding (Kadono: paragraph [0009], lines 1-10); a first B-picture on which inter- coding is performed with reference to two pictures per block which is a basic unit in coding, and which can be referred to by a picture (Kadono: paragraph [0026], lines 21-32); and a second B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in coding, and which cannot be referred to by any other pictures (Kadono: paragraph [0100], lines 1-10), and the picture structure information of the respective pictures includes information indicating whether the picture structure of each picture is: a field structure (Kadono: paragraph [0007], lines 10-17); a first frame structure for displaying the picture using two display fields (Kadono: paragraph [0027], lines 1-9), as in the claim 38. However, Kadono fails to disclose a supplemental information storage step for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information, a second coding step operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures; generating step operable to generate a moving picture stream by storing the coded first and second supplemental

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information into the supplemental information storage unit in the first I-picture, wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down; and a second flame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down, as in the claim. However, Narasimhan discloses a method, protocol, and apparatus for transporting advanced video coding content which includes a supplemental information storage step for storing supplemental information, the supplemental information storage step being placed before the pixel data storage unit, to code first supplemental information in which picture type information (Narasimhan: paragraph [0025], lines 1-12), a second coding step operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Narasimhan: paragraph [0047], lines 1-5); generating step operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture (Narasimhan: paragraph [0049], lines 1-5), wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down (Narasimhan: paragraph [0082], lines 1-6); and a second flame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down in order to configure AVC content for MPEG-2 transport protocols for transmission (Narasimhan: paragraph [0005], lines 1-10; paragraph [0008, lines 1-10). Therefore, given this teaching, it would have been obvious for one of ordinary skill in the art incorporate the Narasimhan SEI coding using

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3:2 pulldown, into the Kadono method in order to configure AVC content for MPEG-2 transport protocols for transmission. The Kadono method, incorporating the Narasimhan SEI coding using 3:2 pulldown, has all of the features of claim 38.

Kadono discloses a moving picture decoding apparatus which decodes and reproduces a stream including a picture including at least a pixel data storage unit for storing pixel data and a information storage unit for storing information (Kadono: figures 3-4, and 7), the information storage unit being placed before the pixel data storage unit (Kadono: paragraph [0146], lines 1-20), said moving picture stream generating apparatus comprising: an instruction obtaining unit to operable to obtain an instruction instructing a special playback (Kadono: paragraph [0013], lines 1-12); an analyzing unit operable to separate first information in which picture type information of each of pictures included in a random access unit is arranged in decoding order of the pictures (Kadono: paragraph [0077], lines 1-12), the random access unit including pictures starting with a first I-picture which is a random access point and ending with a picture immediately before a second I-picture which is a random access point different from the random access point corresponding to the first I-picture (Kadono: paragraph [0026], lines -25); a reproduction picture identifying unit operable to identify a picture necessary for the special playback among the pictures included in the random access unit, based on the analysis performed by said analyzing unit (Kadono: paragraph [0078], lines 1-12); a decoding unit operable to decode and reproduce the picture identified by said reproduction picture identifying unit (Kadono: paragraph [0081], lines 1-5), wherein the picture type information of the respective pictures (Kadono: paragraph [0086], lines 1-9), includes at least: an I- picture on which intra-coding is performed (Kadono: paragraph [0008], lines 1-10); a P-picture

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on which inter-coding is performed with reference to a picture per block which is a basic unit in coding (Kadono: paragraph [0009], lines 1-10); a first B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in coding, and which can be referred to by a picture (Kadono: paragraph [0026], lines 21-32); and a second B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in coding, and which cannot be referred to by any other pictures (Kadono: paragraph [0100], lines 1-10), and the picture structure information of the respective pictures includes information indicating whether the picture structure of each picture is: a field structure (Kadono: paragraph [0007], lines 10-17); a first frame structure for displaying the picture using two display fields (Kadono: paragraph [0027], lines 1-9), as in the claim 39. However, Kadono fails to disclose a supplemental information storage unit for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information, a second coding unit operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures; generating unit operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture, wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down; and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down, as in the claim. However, Narasimhan discloses

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a method, protocol, and apparatus for transporting advanced video coding content which includes a supplemental information storage unit for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information (Narasimhan: paragraph [0025], lines 1-12), a second coding unit operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Narasimhan: paragraph [0047], lines 1-5); generating unit operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture (Narasimhan: paragraph [0049], lines 1-5), wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down (Narasimhan: paragraph [0082], lines 1-6); and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down in order to configure AVC content for MPEG-2 transport protocols for transmission (Narasimhan: paragraph [0005], lines 1-10; paragraph [0008, lines 1-10). Therefore, given this teaching, it would have been obvious for one of ordinary skill in the art incorporate the Narasimhan SEI coding using 3:2 pulldown, into the Kadono decoding apparatus in order to configure AVC content for MPEG-2 transport protocols for transmission. The Kadono decoding apparatus, incorporating the Narasimhan SEI coding using 3:2 pulldown, have all of the features of claim 39.

Kadono discloses a moving picture decoding method which decodes and reproduces a stream including a picture including at least a pixel data storage unit for storing pixel data and a information storage unit for storing information (Kadono: figures 3-4, and 7), the information storage unit being placed before the pixel data storage unit (Kadono: paragraph [0146], lines 1-20), said moving picture stream generating method comprising: an instruction obtaining step to operable to obtain an instruction instructing a special playback (Kadono: paragraph [0013], lines 1-12); an analyzing step operable to separate first information in which picture type information of each of pictures included in a random access unit is arranged in decoding order of the pictures (Kadono: paragraph [0077], lines 1-12), the random access unit including pictures starting with a first I-picture which is a random access point and ending with a picture immediately before a second I-picture which is a random access point different from the random access point corresponding to the first I-picture (Kadono: paragraph [0026], lines -25); a reproduction picture identifying step operable to identify a picture necessary for the special playback among the pictures included in the random access unit, based on the analysis performed by said analyzing unit (Kadono: paragraph [0078], lines 1-12); a decoding step operable to decode and reproduce the picture identified by said reproduction picture identifying unit (Kadono: paragraph [0081], lines 1-5), wherein the picture type information of the respective pictures (Kadono: paragraph [0086], lines 1-9), includes at least: an I- picture on which intra-coding is performed (Kadono: paragraph [0008], lines 1-10); a P-picture on which inter-coding is performed with reference to a picture per block which is a basic unit in coding (Kadono: paragraph [0009], lines 1-10); a first B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in

coding, and which can be referred to by a picture (Kadono: paragraph [0026], lines 21-32); and a second B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in coding, and which cannot be referred to by any other pictures (Kadono: paragraph [0100], lines 1-10), and the picture structure information of the respective pictures includes information indicating whether the picture structure of each picture is: a field structure (Kadono: paragraph [0007], lines 10-17); a first frame structure for displaying the picture using two display fields (Kadono: paragraph [0027], lines 1-9), as in the claim 40. However, Kadono fails to disclose a supplemental information storage unit for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information, a second coding step operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures; generating step operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture, wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down; and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down, as in the claim. However, Narasimhan discloses a method, protocol, and apparatus for transporting advanced video coding content which includes a supplemental information storage unit for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit,

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to code first supplemental information in which picture type information (Narasimhan: paragraph [0025], lines 1-12), a second coding step operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Narasimhan: paragraph [0047], lines 1-5); generating step operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture (Narasimhan: paragraph [0049], lines 1-5), wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down (Narasimhan: paragraph [0082], lines 1-6); and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down in order to configure AVC content for MPEG-2 transport protocols for transmission (Narasimhan: paragraph [0005], lines 1-10; paragraph [0008, lines 1-10). Therefore, given this teaching, it would have been obvious for one of ordinary skill in the art incorporate the Narasimhan SEI coding using 3:2 pulldown, into the Kadono decoding method in order to configure AVC content for MPEG-2 transport protocols for transmission. The Kadono decoding method, incorporating the Narasimhan SEI coding using 3:2 pulldown, has all of the features of claim 40.

Kadono discloses a method for recording, onto a computer readable recording medium (Kadono: paragraph [0146], lines 1-20), a stream including a picture including at least a pixel data storage unit for storing pixel data and a information storage unit for storing information (Kadono: figures 10-12, 14), the information storage unit being

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placed before the pixel data storage unit (Kadono: paragraph [0146], lines 1-20), said method comprising: a first coding step operable to code first information in which picture type information of each of pictures included in a random access unit is arranged in decoding order of the pictures (Kadono: paragraph [0077], lines 1-12), the random access unit including pictures starting with a first I-picture which is a random access point and ending with a picture immediately before a second I-picture which is a random access point different from the random access point corresponding to the first I-picture (Kadono: paragraph [0026], lines -25); a second coding step operable to code second information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Kadono: paragraph [0078], lines 1-12); and a generating step operable to generate a moving picture stream by storing the coded first and second information into the information storage unit in the first I-picture, wherein the picture type information of the respective pictures (Kadono: paragraph [0086], lines 1-9), includes at least: an I- picture on which intra-coding is performed (Kadono: paragraph [0008], lines 1-10); a P-picture on which inter-coding is performed with reference to a picture per block which is a basic unit in coding (Kadono: paragraph [0009], lines 1-10); a first B-picture on which inter- coding is performed with reference to two pictures per block which is a basic unit in coding, and which can be referred to by a picture (Kadono: paragraph [0026], lines 21-32); and a second B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in coding, and which cannot be referred to by any other pictures (Kadono: paragraph [0100], lines 1-10), and the picture structure information of the respective pictures includes information indicating whether the picture structure of each picture is: a field

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structure (Kadono: paragraph [0007], lines 10-17); a first frame structure for displaying the picture using two display fields (Kadono: paragraph [0027], lines 1-9), as in the claim 41. However, Kadono fails to disclose a supplemental information storage step for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information, a second coding step operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures; generating step operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture, wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down; and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down, as in the claim. However, Narasimhan discloses a method, protocol, and apparatus for transporting advanced video coding content which includes a supplemental information storage step for storing supplemental information, the supplemental information storage step being placed before the pixel data storage unit, to code first supplemental information in which picture type information (Narasimhan: paragraph [0025], lines 1-12), a second coding step operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Narasimhan: paragraph [0047], lines 1-5); generating step operable to generate a moving picture stream by storing the coded first and second supplemental information

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into the supplemental information storage unit in the first I-picture (Narasimhan: paragraph [0049], lines 1-5), wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down (Narasimhan: paragraph [0082], lines 1-6); and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down in order to configure AVC content for MPEG-2 transport protocols for transmission (Narasimhan: paragraph [0005], lines 1-10; paragraph [0008, lines 1-10). Therefore, given this teaching, it would have been obvious for one of ordinary skill in the art incorporate the Narasimhan SEI coding using 3:2 pulldown, into the Kadono recording method in order to configure AVC content for MPEG-2 transport protocols for transmission. The Kadono recording method, incorporating the Narasimhan SEI coding using 3:2 pulldown, has all of the features of claim 41.

Kadono discloses moving picture decoding system comprising a computer-readable recording medium (Kadono: paragraph [0146], lines 1-20) on which a stream is recorded and a moving picture decoding apparatus which reads and decoders the stream, the stream including a picture including at least a pixel data storage unit for storing pixel data and a information storage unit for storing information (Kadono: figures 10-12, 14), the information storage unit being placed before the pixel data storage unit (Kadono: paragraph [0146], lines 1-20), wherein in the stream recorded on the recording medium, a first information in which picture type information of each of pictures included in a random access unit is arranged in decoding order of the pictures (Kadono: paragraph [0077], lines 1-12), the random access unit including pictures starting with a first I-

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picture which is a random access point and ending with a picture immediately before a second I-picture which is a random access point different from the random access point corresponding to the first I-picture (Kadono: paragraph [0026], lines -25); a second information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Kadono: paragraph [0078], lines 1-12); the picture type information of the respective pictures (Kadono: paragraph [0086], lines 1-9), includes at least: an I- picture on which intra-coding is performed (Kadono: paragraph [0008], lines 1-10); a P-picture on which inter-coding is performed with reference to a picture per block which is a basic unit in coding (Kadono: paragraph [0009], lines 1-10); a first B-picture on which inter- coding is performed with reference to two pictures per block which is a basic unit in coding, and which can be referred to by a picture (Kadono: paragraph [0026], lines 21-32); and a second B-picture on which inter-coding is performed with reference to two pictures per block which is a basic unit in coding, and which cannot be referred to by any other pictures (Kadono: paragraph [0100], lines 1-10), and the picture structure information of the respective pictures includes information indicating whether the picture structure of each picture is: a field structure (Kadono: paragraph [0007], lines 10-17); a first frame structure for displaying the picture using two display fields (Kadono: paragraph [0027], lines 1-9), as in the claim 42. However, Kadono fails to disclose a supplemental information storage step for storing supplemental information, the supplemental information storage unit being placed before the pixel data storage unit, to code first supplemental information in which picture type information, a second coding step operable to code second supplemental information in which picture structure information of each of the pictures

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included in the random access unit is arranged in the decoding order of the pictures; generating step operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture, wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down; and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down, as in the claim. However, Narasimhan discloses a method, protocol, and apparatus for transporting advanced video coding content which includes a supplemental information storage step for storing supplemental information, the supplemental information storage step being placed before the pixel data storage unit, to code first supplemental information in which picture type information (Narasimhan: paragraph [0025], lines 1-12), a second coding step operable to code second supplemental information in which picture structure information of each of the pictures included in the random access unit is arranged in the decoding order of the pictures (Narasimhan: paragraph [0047], lines 1-5); generating step operable to generate a moving picture stream by storing the coded first and second supplemental information into the supplemental information storage unit in the first I-picture (Narasimhan: paragraph [0049], lines 1-5), wherein the picture type information of the respective pictures includes at least: an I- picture on which intra-coding is performed at the time of using 3-2 pull-down (Narasimhan: paragraph [0082], lines 1-6); and a second frame structure for displaying the picture using three display fields by repeatedly displaying the first display field at the time of using 3-2 pull down in order to configure AVC content for MPEG-2 transport protocols for transmission

(Narasimhan: paragraph [0005], lines 1-10; paragraph [0008, lines 1-10). Therefore, given this teaching, it would have been obvious for one of ordinary skill in the art incorporate the Narasimhan SEI coding using 3:2 pulldown, into the Kadono moving picture decoding system comprising a computer readable recording medium method in order to configure AVC content for MPEG-2 transport protocols for transmission. The Kadono moving picture decoding system comprising a computer-readable recording medium, incorporating the Narasimhan SEI coding using 3:2 pulldown, have all of the features of claim 42.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Toma discloses seamless switching between random access units multiplexed in a multi-angle view multimedia stream.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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asr

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October 30, 2009